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Bio-efficacy of new insecticide molecule Dimilin 48 SC against tobacco caterpillar, *Spodoptera litura* (Fab.) (Noctuidae : Lepidoptera) in tomato

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E valuation of new molecule Dimilin 48 SC along with other insecticide formulations were screened against tobacco Caterpillar *Spodoptera litura* (Fab.) at Main Agricultural Research Station, Dharwad, India during 2007 both in Kharif and Rabi seasons. The results over two seasons showed that Dimilin 200 g + Delta 20 g was found to be the best treatment with lowest incidence (2.4 %) of *S. litura* followed by Dimilin 48SC @ 144g ai/ac (3.4%), Dimilin 48 SC @ 72g ai/ac (4.8 %) and found superior to positive checks Lufenuron 5 SC @12g ai/ac (4.9%) and Novaluron (5.4%). The maximum pod damage was recorded in untreated control (16.3%). The spodoptera larval population dynamics showed significant decrease after 10 days after first spray and larval population was below ETL after 15 days of second spray in both the seasons. The new molecule was not found phytotoxic in any of tested concentrations. Hence, twice spraying with Dimilin 200 g + Delta 20 g and/or Dimilin @ 144g ai/ha could be recommended as one of the component spray in developing Integrated Pest Management package for tobacco caterpillar in tomato.

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